Washington State Department of Health

CONTRACT AMENDMENT

1A. NAME OF CONTRACTOR **Department of Ecology**	2A. CONTRACT NUMBER **N16099**
ADDRESS OF CONTRACTOR (STREET) **PO Box 47600**	2B. AMENDMENT NUMBER **1**
CITY, STATE, ZIP CODE **Olympia, WA 98504-7600**	

3. ☒ **THIS ITEM APPLIES ONLY TO BILATERAL AMENDMENTS.**
The Contract identified herein, including any previous amendments thereto, is hereby amended as set forth in Item 5 below by mutual consent of all parties hereto.

4. ☐ **THIS ITEM APPLIES ONLY TO UNILATERAL AMENDMENTS.**
The Contract identified herein, including any previous amendments thereto, is hereby unilaterally amended as set forth in Item 5 below pursuant to that changes and modifications clause as contained therein.

a) **DESCRIPTION OF AMENDMENT**: The purpose of this amendment is to add Appendix H to the Joint Review Procedures for Planning and Engineering Documents within the original Memorandum of Understanding.

b) **Appendix H is added and is attached hereto and incorporated herein.**

c) **The effective date of this contract is the Date of Execution through December 31, 2015.**

6. All other terms and conditions of the original contract and any subsequent amendments thereto remain in full force and effect.

7. ☐ This is a unilateral amendment. Signature of contractor is not required below.
☒ Contractor hereby acknowledges and accepts the terms and conditions of this amendment. Signature is required below.

8. CONTRACTOR SIGNATURE **(also, please print/type your name)**	DATE
Kenneth O. Slattery Kenneth O. Slattery	4/6/09
9. DOH CONTRACTING OFFICER SIGNATURE	DATE

This document has been approved as to form only by the Assistant Attorney General.

Washington State Department of Health

WASHINGTON STATE DEPARTMENT OF ECOLOGY

DOH Contract #N16099

APPENDIX H: INTERRUPTIBLE WATER RIGHTS JOINT REVIEW PROCEDURES FOR PLANNING AND ENGINEERING DOCUMENTS

MEMORANDUM OF UNDERSTANDING between STATE OF WASHINGTON DEPARTMENT OF HEALTH and DEPARTMENT OF ECOLOGY

Ecology and Health often both become involved when a new water system is proposed or when an existing water system wishes to expand. Ecology's area of authority and expertise is in the realm of deciding if the water system is allowed to use the water resource. Health's responsibility is to ensure that the water system is designed and operated in such a way that water quality, reliability, and other requirements of the drinking water regulations are met.

When a water system wants to expand or a new system is proposed, Ecology may be asked to make a water right decision on an application for change, transfer, or a new right. Alternatively, Ecology may need to comment or act on a water right decision made by a local conservancy board. Whether making decisions directly, or evaluating the decisions of conservancy boards, Ecology does not wish to support a decision on water use that will result in a water rights strategy that will likely be disallowed by Health based on the drinking water regulations.

Reliability concerns associated with interruptible water rights are one reason that Health might not approve a proposed new system or an expansion of an existing system. Health is concerned about rights that are interruptible because their priority date is junior to an associated instream flow requirement.

Health is also concerned with the use of leased water contracts due to the risk of a water supply interruption because the lease might not be renewed or a permanent right might not be obtained prior to expiration of the lease contract.

Interlocal wholesale water agreements (interties) are the subject of a separate paper. Such agreements, almost always involving at least one public entity, are subject to political and economic forces, making such wholesale water agreements more certain than private party leases.

WATER RIGHTS PORTFOLIO APPROACH

Health and Ecology agree, through this amendment to the Health/Ecology MOU, that a portfolio of water rights, composed of at least one non-interruptible water right, is the most appropriate structure for approving new or expanding systems that otherwise would rely only upon interruptible water rights.[1] The quantity of water available under the uninterruptible rights, the timing and duration of the interruption, as well as the system's ability to manage the available water in a safe and reliable manner, should all be taken into consideration when determining whether the portfolio is adequate for approval.

Ecology agrees to consult with Health whenever it reviews a water right change application for a new or expanding water system that proposes a water right portfolio of non-interruptible and interruptible water rights prior to deciding on the application.
Upon request from Ecology, Health will assist Ecology in evaluating:

> (a) whether the non-interruptible water right component of the water right portfolio is capable of meeting the in-home domestic and other non-discretionary water supply requirements during the expected period of interruption; and
> (b) whether the applicant has the capacity to operate within the limits of the non-interruptible water right held by the applicant (for example, to enforce a ban on all outdoor water use and other discretionary uses) during the expected period of interruption.

In this evaluation, Health will:

> (a) use a value of 200 gallons per day (gpd) per residence (or equivalent residential unit) as the minimum amount necessary to meet these basic demands during the entire period of interruption.[2] If the applicant proposes – and Health approves - an alternative using a smaller daily demand value per residence (ERU) that assures continuous capacity to meet all non-discretionary and non-irrigation demands, then Health will inform Ecology of its findings.
> (b) review the applicant's proposal for mandatory curtailment measures demanded of the consumers during periods of interruption. These may be identified in community covenants, bylaws, local ordinances, on property deeds, or any combination of these. Health may suggest Ecology obtain a legal opinion to determine enforceability.

Health's evaluation of the two factors listed above will be documented in writing to Ecology. Based on the information provided by the applicant, Health will document an estimate of the peak water supply flow rate (gpm) and volume (ac-ft) needed by the applicant to maintain the minimum level of service described above during the expected period of interruption.

Ecology will:

(a) determine and document the expected duration and time of year of a potential interruption caused by in-stream flow regulation, when possible, prior to consulting with Health.
(b) make the final decision on a water right change application for a new or expanding water system that proposes a water right portfolio of non-interruptible and interruptible water rights.
(c) deny the water right application (or water right change application), if Health determines that the applicant's proposal for managing the available water supply during the period of interruption risks violating the operating standards described in WAC 246-290-420 (1) - (3).

If the applicant has only interruptible water rights, see the "Interruptible Water Rights Only" section below.

Ecology expects the management of a portfolio of water rights strategy to result in a reduced instantaneous pumping rate from the source in response to regulation of the interruptible water right. Ecology views as unacceptable a water supply management plan that proposes to respond to low instream flows by only changing what portion of the portfolio is being "exercised", and not modifying the amount of water withdrawn/diverted from the source during the period of interruption.

An example of an acceptable water supply management plan might be a system that uses supply-side measures (e.g., variable frequency pump drives, repairing system leaks, throttling pumps) and demand-side measures (e.g., no outdoor watering, water budgets) to reduce diversions when rights are interrupted. An example of an unacceptable water supply management plan might be proposing to "exercise" a previously-perfected, year-round water right only in the winter (to cover another water right that is interruptible in the winter), without first seeking permission through a change application where impairment would be evaluated.

MITIGATION

Ecology is responsible for approving or rejecting mitigation plans designed to compensate for the impacts of using an interruptible water right during times of interruption. Examples of mitigation strategies include aquifer storage and recovery, and storage of water in a non-potable reservoir for release into the surface water during a period of interruption so that groundwater withdrawal could continue.

Ecology is responsible for working with the applicant and water conservancy boards on mitigation proposals. If mitigation arises out of the need to prevent impairment to a private water right, then Ecology will determine the adequacy of the mitigation.

If mitigation is necessary to prevent environmental impacts (such as impacts to instream flow rights), Ecology will work with the applicant to ensure that such measures are addressed through the State Environmental Policy Act (SEPA).

Ecology considers State leases of Federal contract water as acceptable mitigation for out of stream uses on the Columbia River.

If Ecology accepts the applicant's mitigation plan, Health will consider that the water right has no risk of interruption and there will be no special evaluation of the applicant's water supply management plan as described above.

The change of seasonal non-interruptible irrigation rights associated with a stream or river may be subject to the in-stream flow requirements established for that water body during the non-irrigation season. If so, the year-round right is interruptible in the non-irrigation season. For example, non-interruptible seasonal irrigation rights from the Chehalis River that are changed to year-round rights to supply housing or commercial development would be considered interruptible during the non-irrigation season.

Ecology may determine that certain rights will be at such little risk for interruption that they would be considered non-interruptible. If Ecology determines that the risk of interruption is so small as to be considered non-interruptible, then Ecology will document that determination in writing. In such cases, Health will consider that the water right has no risk of interruption and there will be no special evaluation of the applicant's water supply management plan as described above.

In rare circumstances, Ecology may determine that an overriding consideration of public interest (OCPI) is an appropriate basis to approve a water right decision. Making an OCPI determination may result in establishing a non-interruptible water right that would otherwise have been – if not for an OCPI determination – interruptible by being junior to an instream flow requirement. Ecology does not consider OCPI as a common remedy. OCPI can be written into watershed planning documents (and subsequent watershed rules) to allow for some uses.

Ecology will require applicants for whom mitigation is a condition of exercising its water right to submit the necessary information to Ecology at a frequency to be determined by Ecology. Health agrees that such reporting could be included in the purveyor's water system plan and subsequent water system plan updates. Ecology may require that the applicant report more often through alternative means.

INTERRUPTIBLE WATER RIGHTS ONLY

In situations where a mitigation plan is not approved by Ecology, and the only water rights held by the applicant are interruptible, Ecology agrees to consult with Health whenever it reviews a water right change application for a new or expanding water system prior to deciding on the application.

Upon request, Health will assist Ecology in evaluating information from the applicant on the expected water system demands during the period(s) of potential interruption, and the applicant's strategy concerning how these demands will be reliably met.

In this evaluation, Health will:

(a) use a value of 200 gallons per day (gpd) per residence (or equivalent residential unit) as the minimum amount necessary to meet the in-home domestic and other non-discretionary water supply requirements through storage or mitigation during the entire period of interruption.[2] If the applicant proposes – and Health approves - an alternative using a smaller daily demand value per residence (ERU) that assures continuous capacity to meet all non-discretionary and non-irrigation demands, then Health will inform Ecology of its findings.
(b) review the applicant's proposal for mandatory curtailment measures demanded of the consumers during periods of interruption. These may be identified in community covenants, bylaws, local ordinances, on property deeds, or any combination of these. Health may suggest Ecology obtain a legal opinion to determine enforceability.
(c) review the applicant's strategy for meeting the minimum demands specified above during the expected period of interruption.

Health's evaluation of the three factors listed above will be documented in writing to Ecology. Based on the information provided by the applicant, Health will document an estimate of the necessary peak water supply flow rate (gpm) and volume (ac-ft) to maintain the minimum level of service described above during the expected period of interruption.

Ecology will:

(a) determine and document the expected duration and time of year of a potential interruption caused by in-stream flow regulation, when possible, prior to consulting with Health.
(b) make the final decision on a water right change application for a new or expanding water system that proposes a water supply authorized under an interruptible water right.
(c) deny the water right application (or water right change application), if Health determines that the applicant's proposal for managing the available water supply during the period of interruption risks violating the operating standards described in WAC 246-290-420 (1) - (3).

Unfeasible <u>Options</u> for Use of Interruptible Water Rights

Health has already evaluated several potential strategies and determined that they are not feasible. Unfeasible options include the following:

- Establishing an escrow account to lease or purchase a non-interruptible water right in the event of an interruption, because of the time it would take to identify the right, contract with the owner, and transfer the rights(s).

- Non-federal water right leases, including those that derive from Family Farms. (Note: Ecology considers State leases of Federal water rights as acceptable mitigation because they are not revocable and are renewable in perpetuity.)

- Storage of potable water in excess of five (5) days without treatment. In such cases, treatment standards will be determined by Health.

- Trucking water

Feasible Options for Use of Interruptible Water Rights

In summary, Health and Ecology agree the following are the most feasible options for an applicant proposing a new or expanding water system that rely upon interruptible water rights:

- Obtain a portfolio of water rights that provides for at least 200 gallons per day per single family dwelling (ERU) from an approved ground or surface water supply with an associated non-interruptible, non-leased water right. Two hundred (200) gpd/ERU is the minimum amount considered necessary to meet in-home domestic and human health water supply requirements during the expected period of interruption (assumes no outdoor water use). If there are non-discretionary demands for water in addition to in-home domestic, then these demands will be additive to the 200 gpd/ERU minimum supply needed. If the purveyor/developer cannot propose an enforceable administrative structure that prevents water consumption in excess of the available non-interruptible, non-leased supply during periods of interruption, then Health will assign a water supply capacity requirement above the minimum 200 gpd/ERU.

- Pursue mitigation of interruptibility with Ecology, such as aquifer storage and recovery, and storage of water in a non-potable reservoir for release into the surface water during a period of interruption so that groundwater withdrawal could continue.

- If the period of interruption is determined by Ecology to be five days or less, then Health would support mitigation involving constructing a finished water reservoir covering the forecast period of interruption. The decision to permit storage of potable water for longer than five days will be subject to Health's determination of a treatment requirement.

LEASED WATER RIGHTS

Ecology and Health are concerned with the use of leased water contracts for new or expanding water systems because the nature of such arrangements risks a water supply interruption if the lease is not renewed or a permanent right cannot be obtained prior to expiration of the lease contract. For the purpose of this document, federal leased water, such as Bureau of Reclamation leases, are assumed to be non-revocable and are renewable in perpetuity, and are therefore considered an acceptable means of supporting supply to a public drinking water system. Non-federal leased water rights for new public water systems are not considered sufficiently reliable.

Leased Water Rights Portfolio Approach (applies to non-federal leased water rights)

Ecology agrees to consult with Health whenever it reviews a water right change application for a new or expanding water system that proposes a water right portfolio of leased and non-leased water rights prior to deciding on the application.

Upon request, Health will assist Ecology in evaluating:

(a) whether the non-leased water right component of the water right portfolio is capable of meeting the in-home domestic and other non-discretionary water supply requirements during the expected period of interruption; and
(b) whether the applicant has the capacity to operate within the limits of the non-leased water right held by the applicant (for example, to enforce a ban on all outdoor water use and other discretionary uses) in perpetuity.

In this evaluation, Health will:

(a) use a value of 350 gallons per day (gpd) per residence (or equivalent residential unit) as the minimum amount necessary to meet these basic demands during the entire period of interruption.[3] If the applicant proposes – and Health approves - an alternative using a smaller daily demand value per residence (ERU) that assures continuous capacity to meet all non-discretionary and non-irrigation demands, then Health will inform Ecology of its findings.
(b) review the applicant's proposal for mandatory curtailment measures demanded of the consumers upon revocation or non-renewal of the lease(s). These may be identified in community covenants, bylaws, local ordinances, on property deeds, or any combination of these. Health may suggest Ecology obtain a legal opinion to determine enforceability.

Health's evaluation of the two factors listed above will be documented in writing to Ecology.

Ecology will:

(a) deny the water right application (or change application) if a new water system proposal relies completely upon a leased water right.
(b) deny the water right application (or water right change application), if Health determines that the applicant's proposal for managing the available water supply upon expiration or revocation of the leased portion of the portfolio risks violating the operating standards described in WAC 246-290-420 (1) - (3).
(c) inform the applicant that his/her application will be subject to the process described above for interruptible water rights if the non-leased portion of the applicant's water right portfolio is deemed interruptible.

SURFACE WATER TO SURFACE WATER CHANGES

For interruptible water rights or leased water rights, it should be noted that for surface water to surface water changes, Ecology cannot use the public interest test when making a decision on whether to approve or deny the change requested. If reliability becomes an issue with these types of changes, Ecology will contact DOH as early as possible to discuss the proposed change.

TRAINING AND OUTREACH

Ecology and Health will provide training to their appropriate regional staff and encourage dialogue between Ecology and Health regional staff regarding potential reliability issues that may arise in water right permitting and water system plan approval.

Ecology may use the Conservancy Board newsletter to inform the Boards about Ecology and Health's position on water right reliability.

WATER USE AND MITIGATION REPORTING

When Ecology approves new or change applications requiring mitigation, Ecology will include a provision in the water right approval to require yearly reporting on how the water right was actively managed to comply with the mitigation plan.

When Ecology approves new or change applications with interruptible rights which are part of a portfolio of water rights, Ecology will include a provision in the water right approval requiring yearly reporting on how the portfolio of water rights were managed to protect existing rights from impairment.

Ecology will direct the water right holder to report on water right mitigation measures together with annual water production data. Ecology will provide Health with a copy of this annual report. Ecology will determine the level of voluntary compliance with the provisions and can adjust the level of regulatory oversight as necessary.

INFORMATION EXPECTED WITH WATER SYSTEM PLAN UPDATES

Health will require purveyors submitting water system plan updates, pursuant to WAC 246-290-100 (10), to include information regarding the purveyor's on-going authority to effectively enforce restrictions on water use, should such restrictions be necessary.

Footnotes to this document:

1. Practically all water rights are subject to interruption, based on seniority and impairment of senior water rights by another entity. For the purpose of this document, interruption is confined to situations when - as the result of an administrative action taken by Ecology against a water right holder in order to preserve minimum in-stream flows that have seniority over the water right holder's water right – the water right holder is prohibited from withdrawing water for the period of time the minimum instream flow requirements are not met.
2. Health's Water System Design Manual (Chapter 5) indicates that for systems that do not supply water for outdoor use, the average daily demand can be expected to be 200 gpd. (see Section 5.2.1.5). It is expected that interruptions will last for short durations, and therefore providing for an average daily demand (as opposed to maximum daily demand) is reasonable.
3. WAC 246-290-221 (4) requires the design of water systems based upon 350 gallons per day per equivalent residential unit. The reason we apply maximum daily demand (MDD) to the leased water right evaluation is because operation of the water system with only the non-leased portion of the portfolio may be necessary for a very, very long time, and therefore providing for a maximum day demand become necessary.

Approved as to content only:

Denise Addotta Clifford, Director
Office of Drinking Water

Date: March 11, 2009

Approved as to content only:

Ken Slattery
Water Resources Program Manager

Date: April 6, 2009